**DERWENT-ACC-NO: 1997-354440** 

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TITLE: Method of manufacturing optical module with e.g. laser diode, photodiode used in e.g. microscope - involves aligning and connecting upper electrode, formed on lower surface of laser diode, and lower electrode formed on surface of substrate

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**PATENT-FAMILY:** 

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**APPLICATION-DATA:** 

PUB-NO APPL-DESCRIPTOR APPL-NO APPL-DATE
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ABSTRACTED-PUB-NO: JP09145965A

BASIC-ABSTRACT: The method involves detecting the respective image signals of a

first alignment marker (14) and a second alignment marker (14'). The first and second alignment markers are formed on a substrate (10).

An optical waveguide (12) is formed on the substrate corresponding to the laser beam radiating portion (6) of a laser diode (1) based on the detected image signals. An upper electrode (4), formed on the lower surface of the laser diode, and a lower electrode (13), formed on the surface of the substrate, are aligned and connected.

ADVANTAGE - Minimises optical coupling loss between optical waveguide and optical component through highly precise mounting of optical component on substrate. Enables accurate acquisition of beam-radiating surface position, and improves characteristic of optical module.

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**CHOSEN-DRAWING: Dwg.1/8** 

TITLE-TERMS: METHOD MANUFACTURE

METHOD MANUFACTURE OPTICAL MODULE LASER DIODE PHOTODIODE MICROSCOPE ALIGN
CONNECT UPPER ELECTRODE FORMING LOWER SURFACE LASER DIODE LOWER ELECTRODE
FORMING SURFACE SUBSTRATE

**DERWENT-CLASS: P81 U11 U12 V07 V08** 

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